CLAIMS

We Claim:

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- 1. A method for treating a condition with a drug indicated for treatment of said condition, the method comprising the step of orally administering a dosage form containing said drug in a pharmaceutically acceptable carrier wherein said dosage form releases said drug from said dosage form at an ascending release rate for an extended time period.
- 2. The method described in claim wherein said dosage form is an osmotic dosage form comprising:
 - (a) a longitudinally compressed tablet core containing a plurality of layers wherein drug is contained in at least one layer and at least one other layer comprises a suitable fluid-expandable polymer;
 - (b) a semipermeable wall surrounding said longitudinally compressed tablet core to thereby form a compartment having an osmotic gradient to drive fluid from an external fluid environment contacting said semipermeable wall into said compartment; and
 - (c) an orifice formed through said semipermeable wall and into said longitudinally compressed tablet core to permit drug to be released from within said compartment into said external fluid environment.
- 3. The method described in claim/2 wherein said longitudinally compressed tablet core comprises two layers and said drug is contained within a first layer and said fluid-expandable polymer is contained within a second layer and further wherein said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- 4. The method described in claim 3 wherein said osmotic dosage form additionally comprises an immediate-release dose of a drug applied as a coating onto the outer surface of said osmotic dosage form.

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- 5. The method described in claim 2 wherein said longitudinally compressed tablet core comprises three layers and a portion of said drug is contained within a first layer and the remaining portion of said drug is contained within a second layer, wherein the concentration of drug contained within said first layer is less than the concentration of drug contained within said second layer, and wherein said fluid-expandable polymer is contained within a third layer and said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- 6. The method described in claim 5 wherein said osmotic dosage form additionally comprises an immediate release dose of a drug applied as a coating onto the outer surface of said osmotic dosage form.
- 7. A method for treating ADHD, the method comprising the step of orally administering a dosage form containing a CNS-acting drug in a pharmaceutically acceptable carrier wherein said dosage form releases said CNS-acting drug from said dosage form at an ascending release rate for an extended time period.
- 8. The method described in claim 7 wherein said CNS-acting drug is a CNS-stimulant drug selected from the group consisting of methylphenidate, d-threo-methylphenidate, amphetamine, dextroamphetamine, methamphetamine, phenylisopropylamine and pemoline.
- 9. The method described in claim 8 wherein said CNS-stimulant drug is methylphenidate.
- 10. The method described in claim 9 wherein said dosage form is an osmotic dosage form comprising:

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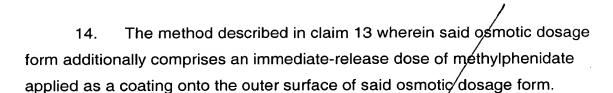
- a longitudinally compressed tablet core containing a (a) plurality of layers wherein methylphenidate is contained in at least one layer and at least one other layer comprises a suitable fluidexpandable polymer;
- a semipermeable wall surrounding said longitudinally (b) compressed tablet core to thereby form a compartment having an osmotic gradient to drive fluid from an external fluid environment contacting said semipermeable wall into sáid compartment; and
- an orifice formed through said semipermeable wall and (c) into said longitudinally compressed tablet core to permit methylphenidate to be released from within said compartment into said external fluid environment.
- The method described/in claim 10 wherein said longitudinally 11. compressed tablet core comprises/two layers-and said methylphenidate is contained within a first layer and/said fluid/expandable polymer is contained within a second layer and further wherein said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- 12. The method/described in claim 11 wherein said osmotic dosage form additionally comprises an immediate-release dose of methylphenidate applied as a coating onto the outer surface of said osmotic dosage form.
- 13. The method described in claim 10 wherein said longitudinally compressed tablet core comprises three layers and a portion of said methylphenidate is contained within a first layer and the remaining portion of said methylphenidate is contained within a second layer, wherein the concentration of methylphenidate contained within said first layer is less than the concentration of methylphenidate contained within said second layer, and wherein said fluid-expandable polymer is contained within a third layer and said orifice is formed through said semipermeable wall at a location adjacent to said first layer.

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- 15. A method for effectively treating ADHD for a prolonged therapy period of at least about 10 hours comprising administering methylphenidate in a dosage form that provides release of methylphenidate at an ascending release rate over an extended time period.
- 16. A method for providing plasma methylphenidate concentrations that are substantially smoothly ascending over an extended time period comprising administering methylphenidate in a dosage form that provides release of methylphenidate at an ascending release rate over an extended time period.
- 17. A dosage form comprising a drug in a pharmaceutically acceptable carrier wherein, following oral administration, said dosage form releases said drug from said dosage form at an ascending release rate for an extended time period.
- 18. The dosage form described in claim 17 wherein said dosage form is an osmotic dosage form comprising:
 - (a) a longitudinally compressed tablet core containing a plurality of layers wherein said drug is contained in at least one layer and at least one other layer comprises a suitable fluid-expandable polymer;
 - (b) /a semipermeable wall surrounding said longitudinally compressed tablet core to thereby form a compartment having an osmotic gradient to drive fluid from an external fluid environment contacting said semipermeable wall into said compartment; and

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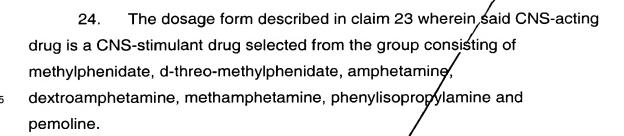


- an orifice formed through said semipermeable wall and (c) into said longitudinally compressed tablet core to permit/drug to be released from within said compartment into said external fluid environment.
- The dosage form described in claim 18 wherein said 19. longitudinally compressed tablet core comprises two layers and said drug is contained within a first layer and said fluid-expandable polymer is contained within a second layer and further wherein said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- The dosage form described/in claim 19 wherein said osmotic 20. dosage form additionally comprises an immediate-release dose of a drug applied as a coating onto the outer sufface of said osmotic dosage form.
- 21. The dosage form described in claim 18 wherein said longitudinally compressed tablet/core comprises three layers and a portion of said drug is contained within a/first layer and the remaining portion of said drug is contained within a second layer/wherein the concentration of drug contained within said first layer is less than the concentration of drug contained within said second layer, and wherein said fluid-expandable polymer is contained within a third layer and said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- The dosage form described in claim 21 wherein said osmotic 22. dosage form additionally comprises an immediate-release dose of a drug applied as a coating onto the outer surface of said osmotic dosage form.
- A dosage form containing a CNS-acting drug in a 23. pharmaceutically acceptable carrier wherein said dosage form, following oral administration, releases said CNS-acting drug from said dosage form at an ascending release rate for an extended time period.

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- 25. The dosage form described in claim 24 wherein said CNS-stimulant drug is methylphenidate.
- 26. The dosage form described in claim 25 wherein said dosage form is an osmotic dosage form comprising:
 - (a) a longitudinally compressed tablet core containing a plurality of layers wherein methylphenidate is contained in at least one layer and at least one other layer comprises a suitable fluid-expandable polymer;
 - (b) a semiper meable wall surrounding said longitudinally compressed tablet core to thereby form a compartment having an osmotic gradient to drive fluid from an external fluid environment contacting said semipermeable wall into said compartment; and
 - (c) an orifice formed through said semipermeable wall and into said longitudinally compressed tablet core to permit methylphenicate to be released from within said compartment into said external fluid environment.
- 27. The dosage form described in claim 26 wherein said longitudinally compressed tablet core comprises two layers and said methylphenidate is contained within a first layer and said fluid-expandable polymer is contained within a second layer and further wherein said orifice is formed through said semipermeable wall at a location adjacent to said first layer.

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- 28. The dosage form described in claim 27 wherein said osmotic dosage form additionally comprises an immediate-release dose of methylphenidate applied as a coating onto the outer surface of said osmotic dosage form.
- 29. The dosage form described in claim 26 wherein said longitudinally compressed tablet core comprises three layers and a portion of said methylphenidate is contained within a first layer and the remaining portion of said methylphenidate is contained within a second layer, wherein the concentration of methylphenidate contained within said first layer is less than the concentration of methylphenidate contained within said second layer, and wherein said fluid-expandable polymer is contained within a third layer and said orifice is formed through said semipermeable wall at a location adjacent to said first layer.
- 30. The dosage form/described in claim 29 wherein said osmotic dosage form additionally comprises an immediate-release dose of methylphenidate applied as a coating onto the outer surface of said osmotic dosage form.
- 31. The dosage form described in claim 30 wherein said coating comprises an antidegradation agent.
- 32. The described in claim 31 wherein said antidegradation agent is phosphoric acid.
- 33. The dosage form described in claim 29 wherein said semipermeable membrane comprises cellulose acetate and a flux-enhancing agent.
- 34. The dosage form described in claim 33 wherein said flux-enhancing agent is a copolymer of ethylene and propylene oxide.

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